



Element Markets LLC

**11th National Renewable Energy Marketing
Conference**

REC Asset Management for Project Developers in an Opaque Market

**Presented by Randy Lack
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Overview of the Presentation

- About Element Markets
- Alliance with ACES Power Marketing
- REC Asset Management structure
- Long-term REC purchase structures



About Element Markets

- ❑ Element Markets was founded in 2004 by four partners with backgrounds as senior managers in sectors ranging from power and gas to emissions/renewable brokerage and grain trading.
- ❑ Element Markets has more environmental attribute transaction experience on staff than any other group in the country (30,000,000+ MWhrs transacted)
- ❑ Element Markets, LLC has been approved by the Center for Resource Solutions to facilitate in the transaction of Green-e® certified Renewable Energy Certificates (RECs)
- ❑ Element Markets has a robust staff dedicated to Research and Asset Management in the REC Markets
- ❑ Element Markets also works in the areas of emission credits and emission reduction technologies



Alliance with ACES Power Marketing

- ❑ APM is an energy risk management and transaction execution company
- ❑ APM and EM formed an alliance so that EM could provide similar risk management services around Renewables and related fields
- ❑ Alliance was officially formed in September 2006



ACES POWER
MARKETING



Services Offered Through ACES

- Phase I: Education with regard to renewables and related markets; including REC Market education, evaluation of assets and obligations, and market forecasting and optimization for clients.
- Phase II: EM offers specific assessments on REC markets, RPS status, and renewable technologies to assist APM clients in making long-term decisions around their Renewable requirement and as a hedge to Greenhouse Gas liabilities.
- Phase III: EM assists in developing new renewable projects with APM clients; including negotiation of PPAs, long-term REC Contracts or derivative products to assist in REC Value optimization, grant and tax incentive management, and assistance in equity financing for the project.
- Phase IV: EM serves as an asset manager for APM clients in managing their RECs and working to hedge their long-term output.



The Asset Management Model

- ❑ Similar to the model used for years in wholesale natural gas and power
- ❑ Client services
 - RECs have value or are required, but they are far removed from the core business; outsourcing acts to reduce risk and the overall cost of operations
- ❑ Asset Manager
 - Strengths include experienced trading staff, dedicated research staff, commercial market expertise, credit capacity, and competitive intelligence in a way to meet client needs



Why is Asset Management for RECs needed?

- ❑ REC markets are fragmented and illiquid
 - Voluntary markets and mandatory markets
 - No standardization
- ❑ Relatively low transaction value
 - REC typically trade for low values per unit
- ❑ Rules and regulations are constantly changing
 - Many states with a RPS in place have already changed their program at least once
- ❑ Cost to develop internal capability is high compared to the cost of outsourcing with an asset manager



REC Management Structure

- Element Markets uses its expertise to:
 - Relay market conditions and competitive intelligence
 - Provide analysis of current and future REC markets
 - Structure and execute transactions



Benefits of Asset Management for RECs

- ▣ Provides market and commercial expertise to the Client at a lower cost than internal organization
- ▣ Reduces the need for mid- and back-office support
- ▣ Provides value to the client for either the cost of compliance or maximizing value for a non-core asset



Long-Term REC Purchase Structures

- ❑ EM finds and helps negotiate long-term REC off-take contracts for a new development
 - REC Structures can vary widely in complexity
- ❑ Locks in value that otherwise would not get factored into the financing structure
- ❑ Helps projects get built



Specific Examples of Our Work To Date

- ❑ Successfully sourced turbines and originated a 10-year REC structure for a 40 MW wind project to be developed in 2007
- ❑ Created a 10-year structure for the RECs from a 30 MW Texas wind project that came online earlier this year
- ❑ Managing about 250,000 RECs annually from wind and landfill gas in Illinois and Indiana over a multi-year term
- ❑ Arranging financing for group of wind farms totaling 100 MW to be developed in 2007



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